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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,467	07/07/2003	Joseph W. Prenn	1128.017	9336
24955	7590	02/13/2006	EXAMINER	
ROGITZ & ASSOCIATES			YIP, WINNIE S	
750 B STREET			ART UNIT	
SUITE 3120			PAPER NUMBER	
SAN DIEGO, CA 92101			3636	

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/615,467

**Applicant(s)**

PRENN ET AL.

**Examiner**

Winnie Yip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,7-9,11,13-17,19-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) 21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,7 and 9 is/are allowed.
- 6) ☒ Claim(s) 2, 8, 11, 13-17,19,20,22-25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Part II DETAILED ACTION***

This office action is in response to applicant's amendment filed on November 8, 2005.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 21 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected specie, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 29, 2005 since applicant did not distinctly and specifically point out the supposed errors in the restriction requirement (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 112***

1. Claims 2, 8, 11, 13-17, 19-20, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regard to claims 2, 11, 15, 20, and 23, it is unclear how can be “each valve elements/ element means turns on a respective axle” if there is only one “gear train shaft”. The claimed features of these claims do not appear consistent with the body of the claimed invention of they dependent claims 1, 13, and 22.

Regard to claim 8, “the actuator” (line 2) lacks a proper antecedent basis which may cause the claim indefinite.

Regard to claim 13, the term “the element” (lines 4, 6, 8) lacks a proper antecedent basis which causes the claims infinite.

***Claim Rejections - 35 USC § 102***

2. Claim 22 stand rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (US Patent No. 6,528,782).

Zhang et al. show and teach a skylight (100) comprising at least one light conveying structure (105) having an upper end covered by a dome shaped transparent cover (160), a lower end covered by a ceiling-mounted diffuser cover (130), and a tubular element extending therebetween, the tubular element formed by a plurality of tubular sections coaxially coupled together, a shroud engaged with the light conveying structure and defining a light passageway (105), and the shroud having a shutter (200) mounted therein, the shutter (200) including a butterfly valve having first and second valve elements (two semicircle side flaps (1320)) (see Figs. 5 and 13b) being operated by a shutter actuator (201), the valve elements (1320) being pivotable about a shaft (1329) of an axle (204) within the shroud, the shutter actuator including a motor that drives the shaft (1329) that extends outward through the shroud and being drove by a motor such that the valve elements being pivotable between an open configuration in which the light passageway is open, and a closed configuration in which the light is blocked, a mechanical shutter control (430) providing a shutter control signal to the shutter actuator to operate the butterfly valve (201), the mechanical shutter control (430) being operated either by an automatically controlled wirelessly remote control/transmitter (480) or a manually controlled electrical switch simply employed by an off-on switch (456), and manually controlled rheostat (457), a power supply to supply AC power in a supply voltage to operate the shutter actuator/motor (see col. 24, lines 18-59, and Fig. 2a), and the shutter actuator (201 or 1310) may include an electric motor to drive reduction gear train (1310) which includes a rack gear (1312)

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and a pinion with a cam (1314, see Fig. 13b) to reduce a speed of rotation of the motor to an operating speed of the gear train shaft (1329) or may be applied by electrical control circuit, and the pinion (1314) providing a cam (1314) coupling the gear train shaft (1329) to transform a rotation of the gear train shaft (1329) to a rotation of the first and second valve elements about 90 degrees (disposed up and down vertically in a maximum open position), and wherein the power supply operating to power the motor at a voltage about 115 voltage (100V).

***Claim Rejections - 35 USC § 103***

3. Claims 13-14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. '782 in view of further in view of Ghosh et al. (US Patent No. 6,108,226).

Zhang et al. show and teach a skylight (100) comprising at least one light conveying structure (105) having an upper end covered by a dome shaped transparent cover (160), a lower end covered by a ceiling-mounted diffuser cover (130), and a tubular element extending therebetween, the tubular element formed by a plurality of tubular sections coaxially coupled together, a shroud engaged with the light conveying structure and defining a light passageway (105), and the shroud having a shutter (200) mounted therein, the shutter (200) including a butterfly valve (202) having first and second valve elements (two semicircle side flaps (1320)) (see Figs. 5 and 13b) turn on a shaft (1329) which is pivotable about a shaft an axle (204) within the shroud, the shaft (1329) extending outward through the shroud, the valve elements being operated by an actuator (201) between an open configuration in which the light passageway is open, and a closed configuration in which the light is blocked, the actuator (201) actuated by either manually controlled electrical switch or automatically controlled wirelessly remote control, and a power supply to supply AC power in a supply voltage about 115 voltage (100V) to

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operate the shutter actuator (see col. 24, lines 18-59, and Fig. 2a); wherein a mechanical control (430) is either operated by a remote control (480) or simply employed by an off-on switch (456), and manually controlled rheostat (457), the shutter actuator includes an electric motor to drive reduction gear train (1310) which includes a rack gear (1312) and a pinion with a cam (1314, see Fig. 13b) to reduce a speed of rotation of the motor to an operating speed of the gear train shaft (1329) or may be applied by electrical control circuit, and the pinion/cam (1314) coupling the gear train shaft (1329) to the valve elements (1320) to transform a suitable degrees of rotation of the gear train shaft to the rotation of the valves. Although Zhang et al. does not define the assembly having the power supply can operate to supply power to the motor when the voltage input to the power supply is either about 100V and about 270V as claimed, Ghosh et al. teach, as known in the art, a voltage selection apparatus used for providing conversion of a wide range of utility voltages found worldwide to a fixed nominal voltage for operation of an equipment in different country systems, comprising an input for receiving input AC voltage from any power sources worldwide, a voltage detector, a control circuit, and a transformer to produce an output voltage to achieve a desired nominal output voltage from the transformer, and being able to "plug in" to virtually any power source for worldwide use to switch the AC voltage input in the range including a first input voltage of about 100V (90V-132V) or a second input voltage about AC 270V used in different countries to supply power to operate the load equipment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the skylight control system of Zhang et al. having a voltage selection apparatus including a switching power supply control circuit with transformers as taught by Ghosh et al. for providing an universal power supply system to convert a wide range of utility voltages found worldwide to

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a fixed nominal voltage level such as about 100V and 270V to supply power to operate an electrical equipment used in different country systems.

4. Claims 24-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng et al. '782 as applied to claim 22 above, and further in view of Knecht (US Patent No. 3,070,345).

The claims are considered to meet by Zheng et al. as applied and supplied above rejections except that Zheng et al. does not define the shroud being separately mounted from the light conveying structure and has a height less than the diameter of the valve elements as claimed. Knecht teaches a shroud (1) being separately mounted in a tubular member/pipe member, the shroud (1) having valve elements (2a, 2b) pivotally connected to shroud, the shroud having a height less than the diameter of the valve elements, and the shroud being formed with a lip (10) circumscribing an inner surface of the shroud for supporting and abutting the movement of the valve elements. It would have been obvious to one ordinary skill in the art to modify the skylight of Zheng et al. having the shutter being formed with a shroud having a height less than a diameter of the valve elements and having a lip circumscribing an inner surface of the shroud for supporting and abutting the valve elements as taught by Knecht for reducing constructional weight and easily to separately mount the shroud on the light conveying structure in a lightweight manner.

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5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng et al. '782 in view of Ghosh et al. '226 as applied to claim 13 above, and further in view of Knecht (US Patent No. 3,070,345) for the same reasons set forth above.

***Allowable Subject Matter***

6. Claims 1, 3-4, 7, and 9 are allowed.

7. Claim 2, 8, 11, 15, 19-20, and 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Response to Argument***

8. Applicant's arguments, filed November 8, 2005, with respect to claim 1 rejection under 35 U.S.C. 102(e) to Zhang et al. '782 as failing to show certain features of applicant's invention have been fully considered and are persuasive. The rejection of claim 1 to Zhang et al. '782 has been withdrawn.

1. In response to applicant's argument with respect to claim 22 rejection under 35 U.S.C. 102(e) to Zhang et al. '782 as failing to show certain features of applicant's invention have been fully considered and are not persuasive. it is noted that the feature upon which applicant relies (i.e., to transform 180 degrees of rotation of gear train shaft to 90 degrees of rotation of the valve element) is not recited in the rejected claim 22. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van*



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*Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As discussed set forth above, Zhang et al. teaches, as shown in Fig. 13(b), the shutter/valve actuator comprising a reduction gear train (1312) being operated to reduce the speed of rotation of a motor to an operating speed of a gear train shaft (1329), a pinion (1314) providing a cam that couples the gear train shaft to the shutter/valve elements to transform a rotation of the gear train shaft to the rotation of the valve elements (may be in the same degrees). Notice, the claim 22 does not claim the specific degrees of the rotation of the gear train shaft and the rotation of the valve element. Therefore, the rejection stand granted.

2. In response to applicant's argument with respect to claims 13-17, 19-21 being rejected under 35 USC 103(a) to Zhang et al. '782 in view of Hirosawa '296 that there is no suggestion to combine the references have been fully considered. Although examiner does not agreed applicants argument, for achieving the *prima facie case* become clear, the rejection to Hirosawa is withdrawn. However, upon further consideration, a new ground of rejection is made in view of Ghosh et al. '226 as discussed set forth above.


#### ***Inquiry Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 571-272-6870. The examiner can normally be reached on M-F (9:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Winnie Yip  
Primary Examiner  
Art Unit 3636

wsy  
February 1, 2006